Undescribed Crane-Flies in the Paris Museum (Tipulide, Diptera):

Part III,

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The present report is a continuation of the two preceding papers under this general title. The species discussed at this time are largely from China and Mongolia where they were collected by Dr. Vaillant, Dr. du Chazaud, Père David and Père Cavalerie. The discovery of the female sex of the Alaskan Ornithodes harrimani Coquillett is of exceptional interest. The writer would express his thanks to Dr. Bouvier and Mons. Séguy for their continued interest in the progress of this report.

OLD WORLD SPECIES.

SUBFAMILY LIMNOBILNAE.

TRIBE ERIOPTERINI.

Genus Erioptera Meigen.

Erioptera (Acyphona) gobiensis nov. sp.

General coloration light grey; lateral margins of praescutum yellow; pleura yellowish, variegated with grey; wings yellowish subhyaline, the cord indistinctly scamed with darker; cell 1 st M_2 closed, or open by atrophy of outer deflection of M_3 ; and veins divergent, abdominal segments annulated brown and obscure yellow.

Male. — Length about 5 mm.; wing, 5-5.2 mm.

Female. — Length 6 mm.; wing, 6-6.5 mm.

Rostrum very small; palpi short, brown, the basal segments yellowish. Antennae dark brown, the apex of the first segment yellowish; second scapal segment large, widened distally; flagellar segments short, crowded. Head grey, very narrowly and indistinctly paler adjoining the inner margin of eyes.

Pronotum yellowish laterally, Menosotum light grey with a very narrow, capillary, brown stripe that is sometimes obliterated; lateral margins of praescutum broadly and conspicuously light yellow: tuberculate pits and pseudosutural foveae dark, about on a level; scutal lobes dark grey, the median area lighter grey; scutchlum grey anteriorly, margined posteriorly with obscure yellow; postnotum broadly grey medially, yellowish laterally. Pleura yellow, variegated with grey. Mesosternum dark grey. Halteres vellow. Legs with the coxae yellow, the bases infumed; trochanters yellow; femora brownish yellow, the tips broadly infuscated: tibiae an metatarsi obscure yellow, tipped with brown; remainder of tarsi dark brown. vellowish subhyaline, the cord and outer end of cell 1st M2 faintly seamed with darker; a brown spot at end of R_1 ; veins brown. Sc_1 ending just before r; Sc_2 far from tip of Sc_1 , approximately opposite origin of Rs, in some cases a little beyond, in others a little before this origin; Rs long, straight; r on R_2 less than its own length beyond the fork of R_{2+3} ; R_{2+3} and r-m subequal; cell 1st M_2 usually open by the atrophy of the outer deflection of M_3 : m punctiform; basal deflection of Cu_4 before the fork of M, this distance greater than one-half its length; vein 2nd A straight, the two anal veins being strongly divergent. In some cases the crossvein is atrophied so the distal section of M_3 lies free in the membrane.

Abdomen dark brown, the caudal margin of the segments broadly obscure yellow; genitalia in both sexes reddish yellow. Male hypopygium with two pleural appendages, the largest triangular in outline, the broad base of this triangle forming the distal margin, blackened and provided with a few setae; outer pleural appendage pale, flattened triangular, about as long as the inner appendage. At the base of each pleurite on inner face a blackened lobe whose outer margin and apex are covered with abundant denticles. Gonapophyses appearing as four slender pale horns, the two longest being divergent apically. What seems to be the ninth tergite appear as two flattened black lobes that are conspicuously separated on the median line, the caudal and proximal margins of each lobe with a series of microscopic, appressed teeth.

Habitat. — Mongolia (Gobi).

Holotype, &, Cha-Tchéou, marais de Pa-hou-lian, May 1909 (Dr L. Vaillant).

Allotopotype, ♀.

Paratopotypes, 20 ♂ \?.

Type in the collection of the Paris Museum.

The reference of this species to Acyphona is provisional. The insect, together E.(A.) areolata Siebke of Northern Europe and other species, does not seem to be consubgeneric with true Acyphona.

Erioptera (Empeda) vaillanti nov. sp.

General coloration brown; halteres yellow; wings greyish; Sc comparatively short, R_2 not oblique; cell ist M_2 closed; basal deflection of Cu_1 before the fork of M.

Female. - Length about, 3.8 mm.; wing, 4.6 mm.

Rostrum and palpi dark brown. Antennae dark brown. Head dark grey.

Pronotum whitish testaceous. Mesonotal praescutum greyish brown, unmarked; tuberculate pits lying slightly caudad of the level of the pseudosutural foveae, shiny black, separated from one another by a distance about equal to one-half the diameter of one; pseudosutural foveae shiny black; posterior margin of scutellum obscure yellow. Plenra reddish brown, sparsely grey pruinose. Halteres yellow. Legs with the coxae and trochanters obscure yellow; femora brown, the bases paler; tibiae and tarsi light brown. Wings faintly greyish, highly iridescent; stigma lacking; veins pale brown. Only a single wing remains on the unique type. Venation: Sc comparatively short, ending before midlength of Rs, Sc_2 not far removed from tip of Sc_1 (as in the subgenus); r faint, R_{2+3} less than its own length beyond the end of Rs; R_{2+3} longer than R_2 but shorter than R_3 ; R_2 intermediate in obliquity between E. (E, 1) flava and E. (E, 1) nubila; cell 1st M_2 closed; m about one-half the outer deflection of M_3 ; basal deflection of Cu_1 before the fork of M, the distance about equal to m.

Abdomen light brown, the valves of the ovipositor horn-colored.

Habitat. — Mongolia (Gobi).

Holotype, \mathfrak{P} , Cha Tchéou à Kan Tchéou, Nan Chan, versant nord, altitude 1000-2000 meters, June 1909 (Dr. L. Vaillant).

Type in the collection of the Paris Museum.

Genus Gonomyia Meigen.

Gonomyia (Ptilostena) reticulata nov. sp.

General coloration brown; halteres yellow with brown knobs; legs brownish yellow, the tarsi dark brown; wings subhyaline with a reticulate pattern of brown dots along the veins; Se long, Se_2 opposite the origin of Rs; R_1 and R_2 in punctiform contact at wing-margin; a supernumerary crossvein in cell R_3 .

Female. — Length, 7 mm.; wing, 7 mm.

Type badly discolored by grease.

Head, rostrum and palpi dark. Antennea bicolorous, about the basal half of each flagellar segment dark brown, the apex conspicuously yellow.

Thorax dark, badly discoloring any possible pruinosity. Halteres elongate, yellow, the knobs brown. Legs with the coxae and trochanters brown; femora and tibiae brownish yellow, the tips slightly darkened; tarsi dark brown, the metatarsi paler. Wings subhyaline with a brown reticulate pattern of abundant spots and dots, these series of dots lying along the veins and extending into the cells; centers of the cells washed with pale brown; the dots in the costal cell are darker and heavier; larger brown spots at stigma, origin of Rs and at ends of veins R_3 and R_{4+5} . Venation: Sc long; Sc_1 extending to just beyond midlength of Rs, Sc_2 far removed from tip of Sc_1 , opposite origin of Rs; R_1 and R_2 in punctiform conctact at wing-margin; a strong supernumerary crossvein in cell R_3 at the bend of R_3 , the latter almost in a line with this crossvein; cell M_2 open by the atrophy of the outer deflection of M_3 ; basal deflection of Cu_1 nearly its own length before the fork of M.

Abdomen dark brown, the sternites paler brown.

Habitat. — Mongolia (Gobi).

Holotype, ♥, Cha Tchéou à Kan Tchéon, Nan Chan, versant nord, altitude 1000-2000 meters, June 1909 (Dr. L. Vaillant).

Type in the Collection of the Paris Museum.

The only other species of *Gonomyia* known with a supernumerary crossvein in cell R_3 is G, jucunda Loew of Europe, a very different fly.